

## ABSTRACT OF THE DISCLOSURE

DATA PROCESSING SYSTEM AND METHOD FOR MAINTAINING SECURE  
USER PRIVATE KEYS IN NON-SECURE STORAGE

1           A data processing system and method are disclosed for  
2 maintaining secure user private keys in a non-secure storage  
3 device. A master key pair is established for the system. The  
4 master key pair includes a master private key and a master  
5 public key. The master key pair is stored in a protected  
6 storage device. A unique user key pair is established for  
7 each user. The user key pair includes a user private key and  
8 a user public key. The user private key is encrypted  
9 utilizing the master public key. The encrypted user private  
10 key is stored in the non-secure storage device, wherein the  
11 encrypted user private key is secure while stored in the non-  
12 secure storage device.